Principle Overview

What is a principle?
A principle is a statement that guides decision-making. Information Technology Architecture Principles can guide decision making in areas such as:

- Selection of products

- Design of solutions

- Methods or approach

- Scope of projects

- Go/no go decisions on projects

- Prioritization

Elements of effective principles
In order for principles to be effective, they:

- Must have a rationale that is business based.

- Must guide decision making. If they Aren't

    - Either didn't need it because it is a well-accepted practice
    - Or there is a weak or no governance to enforce it

- Must stand the test of time

    - Principles that change often are weak principles

- Must be crisp and succinct

- Use easily understood terminology wherever possible

    - Principles are a shared language between business and IT

- Must be controversial or reflect lessons learned

    - Should not be well-accepted practices, current policies or motherhood and apple pie statements (e.g. all software should be of high quality)

    - Should be able to argue the point

Scope of the Principles in this document
The primary focus of these principles is for business processes, data, and technologies of the Enterprise Architecture that are shared across the state (Tier One). However when possible, the application of the principles to individual agency architectures, and sub-agency architectures (Tiers 2 & 3), improves the consistency and cohesiveness across architectures.

Washington State Principles

1.   The Commonality Principle

SHOULD BE COMMON ONLY WHERE THERE IS A CLEAR BUSINESS CASE

Rationale:
- We have a decentralized approach to funding, people/resource allocation, priorities, governance and management which drives to an uncommon architecture without a strong business case

- The greater the number of agencies that use the Enterprise Architecture, the greater the ability of agencies to leverage each others IT investments

Implications:
- Enterprise Architecture has an obligation to ensure there is a good business case for including a process, data, or technology in Tier One.

- Agencies should have good business case for deviations from process, data, or technology in Tier One.

- Mandatory compliance may be required for some processes, data, or technologies that have strong risk implications to the state (e.g. some security components)

- The Enterprise Architecture process should be designed to encourage participation from a broad range of agencies.

- May require change in funding approach

2.   The Natural Boundaries Principle

SHOULD BE DESIGNED AROUND NATURAL BOUNDARIES

Rationale:
- Achieving the ability to view state government as a single enterprise requires the ability to effectively integrate systems as needed. Systems with well defined, natural boundaries aid in integration.

Implications:

- In order to meet its mandate in a timely manner, the state will need to leverage and use all of its available resources including the existing environment.

- Within the boundaries of an "Information system", tight coupling streamlines business processes.

- Between "Information systems", loose coupling allows open, plug and play approach.

- Requires definitions of what is in and out of scope of state-wide "information systems"

- Requires enterprise-level business and data modeling.

3.   The External Linkages Principle

SHOULD FACILITATE LINKAGES WITH EXTERNAL PARTNERS

Rationale:
- Achieving results at less cost through creative budget solutions may require increased partnering with external entities.

- Many of the approaches and techniques used for linking with external entities can also be used within the state to improve our ability to consolidate similar activities in different agencies.

- Improved linkages to external partners can improve services to citizens

Implications:
- Will have security implications (more granular – connectivity and sharing without compromising own security.)

- May require migration to open or industry standards.

- May require some enterprise level metadata.

- Systems should be constructed with clearly defined interfaces.

- Inter-system communication mechanisms (e.g. messaging infrastructure) become more important.

4.   The Scalability Principle

SHOULD BE SCALABLE TO SUPPORT DIFFERENT SIZE ORGANIZATIONS AND LOADS AND HANDLE GROWTH OR DECLINE IN BUSINESS LEVELS

Rationale:

- Spending reprioritization, program elimination, or consolidation of similar activities in different agencies may require systems to scale up or down to support changes in business level.

Implications:

- May affect charge-back model.

- May impact user interface choices.

- Will require flexibility to support different business processes.

- Will require strong capacity planning scope or model.

5.   **The Security Principle**

SHOULD PROTECT INFORMATION ASSETS

Rationale:

- Citizens look to government to play a key role in safeguarding both their physical security, and their personal information.

Implications:

- Will require more enterprise-level security "minimum-level thresholds" to prevent "weakest links" from compromising security for all.

- May require consistent business rules

- May require broader risk analysis

- May require layers of security

6.   **The Customer Viewpoint Principle**

SHOULD BE DESIGNED AROUND THE CUSTOMERS VIEWPOINT AND PROVIDE A CONSISTENT CUSTOMER EXPERIENCE

Rationale:

- State government is increasingly required to be viewed as a single enterprise.

Implications:

- May support functions like single sign-on, one-stop shopping, and common payment options for customers.

- May require numerous systems to shift from a transactional model to a more customer-centric model.

- Will require additional understanding of customer usage patterns.

- May require additional "look and feel" standards and compliance.

- May require an enterprise portal strategy.

- Should facilitate access for all users

7. <u>The Business Ownership Principle</u>

SHOULD HAVE A CLEAR BUSINESS OWNER

Rationale:
- The Architecture will need to accommodate the constant changes that impact the services the State delivers, and how the State delivers those services. Understanding who owns which piece of the architecture helps ensure those most affected by those changes are involved up front.

Implications:
- High-Level Business Process and Data modeling needs to occur in order to determine ownership.

- Business leadership needs to be involved in order to accept ownership.

- As components are added to the architecture they should include owner as an attribute.

8. <u>The Business Continuity Principle</u>

SHOULD BE DESIGNED AND IMPLEMENTED IN A WAY THAT MINMIZES INTERUPTIONS TO SERVICE

Rationale:
- Citizens expect government to take the appropriate measures to ensure government services won't be interrupted.

Implications:
- An enterprise view of Disaster Recovery and Business Continuity will need to be developed.

9. <u>The Interoperability Principle</u>

SHOULD ENABLE INTEROPERABILITY

Rationale:
- Interoperability will be required to support critical government initiatives such as Homeland Security or Public Safety.

- Interoperability will be required to support business drivers such as the ability to view state government as a single enterprise, and the ability to consolidate similar functions

- Interoperability facilitates data sharing between internal and external partners. This supports streamlining processes, improving service and reducing costs.

Implications:

- Will have security implications

- May require migration to open or industry standards